

**FACT SHEET
FOR MAJOR MODIFICATION OF
GENERAL PERMIT NO. LAG380000 - AI 87051
DISCHARGES FROM POTABLE WATER TREATMENT PLANTS**

FACT SHEET FOR THE MAJOR MODIFICATION OF LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (LPDES) PERMIT FOR DISCHARGES FROM POTABLE WATER TREATMENT PLANTS

Permit No. LAG380000

Issuing Office: State of Louisiana
Department of Environmental Quality
Office of Environmental Services
Water Permits Division
Municipal and General Water Permits Section

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Permit Action: Modification of a General Permit for Discharges from Potable Water Treatment Plants

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I. COVERED ACTIVITY (LAC 33:IX.2905.A.1)

Facilities types covered by this general permit remain unchanged from the original permit issued on December 17, 2004, with an effective date of January 1, 2005.

II. CHANGES THAT CONSTITUTE A PERMIT MAJOR MODIFICATION

The permit is being modified to expand coverage to regulate discharges from potable water treatment plants that use a brine solution to regenerate filters and discharge to a receiving water body where a water quality screen has determined that effluent limitations for chlorides are not required to protect the in-stream chloride standard of the receiving stream and to protect the designated uses of the receiving stream.

It has recently come to the attention of permitting personnel that a number of potable water treatment plants that use a brine solution to regenerate filters discharge relatively low volumes of wastewater and they discharge the wastewater to receiving streams that have the capacity to assimilate the chlorides due to the size of the receiving water body, the turbulence and flow rate of the receiving water body, and the volume of wastewater that is discharged from the facility.

A water quality screen is a calculation to determine whether water quality based permit limitations are required for a particular discharge, based on factors including effluent and receiving stream flow volumes and the in-stream standard for the parameter of concern. In accordance with the Louisiana Water Quality Management Plan (WQMP) Volume 3, Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, water quality screens that have been conducted to determine water quality based permit limits for chloride discharges from these facilities have resulted in the issuance of individual LPDES permits where no permit limitation for chlorides is necessary to maintain the in-stream chloride criteria of the receiving water body and to protect for the designated uses of the receiving stream.

In response to these recent permit actions, the Water Permits Division has decided to modify the general permit for discharges from potable water treatment plants to allow general permit coverage to facilities that use a brine solution to regenerate filters and discharge to a receiving stream where a water quality screen has determined that effluent limitations for chlorides are not required to protect for the designated uses of the receiving stream.

Technology based permit limitations for discharges of chlorides do not exist. Therefore, a permit writer must conduct a water quality screen to determine if discharges from treatment systems that use a brine solution to regenerate filters require end of pipe chloride limits to ensure that the discharges will not result in the violation of the instream numerical criteria for chlorides for the particular water body that will receive the discharges from the treatment system. The results of the water quality screen are used to establish a water quality based permit limit for chlorides that will ensure that discharges from the treatment system are protective of instream chloride standards for the particular receiving water body.

The water quality screen for any facility that is permitted under Schedule D of the modified general permit will be attached to the permit Statement of Basis that is prepared to document that a facility's discharges are eligible for coverage under Schedule D of the modified general permit.

Sometimes the water quality screen reveals that a water quality based permit limitation for chlorides is not required to maintain the instream chloride criteria for the receiving stream and to protect the designated uses of the receiving water body. Only those potable water treatment plants whose discharges do not require a water quality based permit limitation for chlorides will be eligible for coverage under Schedule D of the modified general permit. Facilities permitted to discharge under Schedule D of the modified general permit will be required to monitor their discharges periodically to determine the chlorides concentration of the discharges and to submit the results of the monitoring to LDEQ. The monitoring data that is received by LDEQ can be used to continue to evaluate the discharges from the permitted facilities to ensure that any future increase in discharges from the facility is properly permitted. Should the nature of a facility's discharges change dramatically over time, a new water quality screen can be conducted to determine if the facility's increased discharges require coverage under an individual LPDES permit. Should it be determined that an individual LPDES permit is required, general permit authorization will be terminated at the time that the individual permit is issued.

Allowing discharges from facilities that use a brine solution to regenerate filters to be covered under the general permit facilitates the permit issuance process by eliminating the need to develop and issue an individual LPDES permit for these discharges at sites where it has been determined that the discharge will have a minimal impact on the water quality of the receiving stream. Allowing coverage under this

general permit for these low-impact wastewaters will allow the Department to devote more resources to issuing individual LPDES permits to industrial facilities with discharges that require more regulatory oversight. Allowing general permit coverage for these dischargers also minimizes the LPDES permit related fees that the facility is charged for discharges that are necessary to supply a safe and healthy source of affordable drinking water to nearby residents and communities.

When an approved or established TMDL has not specified a wasteload allocation applicable to discharges covered by this general permit, but has not specifically excluded these discharges, it will generally be assumed that discharges from facilities permitted under this general permit are consistent with approved TMDLs. In order to meet the assumptions and requirements of established or approved TMDLs, coverage under this general permit may be denied and regulation under an individual permit required. Facilities that discharge to a specific 303(d) listed impaired water body will not be eligible for coverage under this general permit if the TMDL for that particular water body specifically excludes discharges covered by this general permit, or where the discharge can be expected to cause or contribute to the water quality impairment addressed by the TMDL.

This modification does not, nor is it intended to, change, modify, or revoke any effluent limitation contained in the permit. Treatment plants that use zeolite recharge systems to treat source water were ineligible for coverage under the initial version of the permit, unless their end-of-pipe chloride levels were equal to or less than 250 mg/l. The modification will expand coverage under the general permit to include potable water treatment plants that use zeolite recharge systems to treat source water and discharge to a receiving water body where a water quality screen was conducted to determine that an LPDES permit limitation for chlorides is not required to protect the instream chlorides criteria of the receiving water body.

Other minor changes, as described below, are being made in the permit.

II. OTHER MINOR CHANGES

Some of the telephone numbers and Department email addresses found in the current permit are outdated. Telephone number and Department email addresses were corrected as needed throughout the modified permit document.

Part I, Pages 9 and 10 of 12:

Inserted these two pages (which constitute the permit major modification).

The effluent limitations and monitoring requirements of the permit are unchanged and are adequate to protect for the designated uses and water quality standards of Louisiana.

The NOIs that are received for general permit coverage undergo an extensive review, including water quality screens for potable water treatment plants that have the potential to discharge chlorides where the end-of-pipe chloride levels are greater than or equal to 250 mg/l. Therefore, the discharges covered by the general permit and this modification should not pose any reasonable potential to cause or contribute to any existing water quality or 303(d) listed impairment.

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to modify the permit to include the changes described in Sections I and II above.